



# Humboldt Bay National Wildlife Refuge Complex

Planning Update #1—Winter 2007

## Humboldt Bay NWR Complex Overview

Humboldt Bay National Wildlife
Refuge (NWR) Complex,
which includes
Humboldt Bay
National
Wildlife
Refuge
(HBNWR)
and Castle
Rock National
Wildlife Refuge

Aleutian

Aleutian cackling goose

California coast. In 1971 the HBNWR was established to conserve coastal habitats for a great diversity of animals and plants, especially migratory birds. In later years the refuge added the Lanphere and Male'l Dunes Units, to help conserve the most pristine remaining dune ecosystem on the west coast of North America.

(CRNWR), is located

on the northwest

The refuge complex also includes Castle Rock NWR, a 14-acre island located in Del Norte County, less than a mile northwest of Crescent City. This refuge hosts one of the largest and most diverse colonies of breeding seabirds on the Pacific coast and provides a roost for approximately 20,000 Aleutian cackling geese during their migration.

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#### **Greetings from the Refuge Manager**

The Humboldt Bay National Wildlife Refuge Complex is about to embark on an important two-year process to develop a Comprehensive Conservation Plan (CCP) for the Refuge Complex. This CCP will help guide overall refuge management for the next 15 years. Your ideas and comments will be an important part of the process, so I'd like to invite you to participate by providing your suggestions for refuge complex management.

Before we begin the process, I'd like to provide background information about the Refuges' history, operation, and goals. You'll also find some information about the National Wildlife Refuge System and how comprehensive conservation

planning fits into the overall picture of refuge management.

Planning will officially begin during the winter of 2006-07. This is our first planning update describing

the beginning of the planning process and information about attending our public scoping meetings.

We will frequently refer to aspects of the background materials provided in this planning update



Red-legged frog

throughout the CCP process. Understanding the planning process will help all of us start on the same page when we begin our public scoping meetings.

Please contact me or David Bergendorf if you have any questions. See page 7 to learn about the CCP process and page 8 for our phone numbers and email addresses.

Eric Nelson

Project Leader/Refuge Manager

Erw Wel

 $\begin{array}{c} Humboldt \ Bay \ Owl's \\ Clover \end{array}$ 

Humboldt Bay NWRC P.O. Box 576 1020 Ranch Rd. Loleta, CA 95551-9633

# "Wild beasts and birds are by right not the property merely of people who are alive today, but the property of unknown generations whose belongings we have no right to squander."

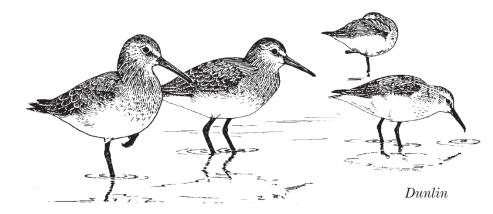
—President Theodore Roosevelt

#### What is the U.S. Fish and Wildlife Service?

The U.S. Fish and Wildlife Service (FWS) is the principal federal agency responsible for conserving, protecting and enhancing fish, wildlife and plants and their habitats for the continuing benefit of the American people.

The Service manages the 95 million acre National Wildlife Refuge System which encompasses 545 national wildlife refuges, thousands of small wetlands and other special management areas. The FWS also operates 66 national fish hatcheries, 64 fishery resource offices and 78 ecological services field stations.

The FWS enforces Federal wildlife laws, administers the Endangered Species Act, manages migratory bird populations, restores nationally significant fisheries, conserves and restores wildlife habitat such as wetlands, and helps foreign governments with their conservation efforts. It also oversees the Federal Assistance program that distributes hundreds of millions of dollars in excise taxes on fishing and hunting equipment to state fish and wildlife agencies.



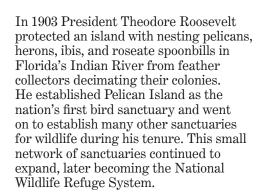
#### What's in a name?

Many people confuse state and federal fish and wildlife agencies because their names are similar. The U.S. Fish and Wildlife Service (FWS) is a federal agency within the U.S. Department of Interior. The California Department of Fish and Game (DFG) is a department within the California Resources Agency.

Our names are similar and so are our missions: Both agencies are dedicated to the conservation of wildlife for the benefit of present and future generations. Our jurisdictions are different. The FWS is the lead agency responsible for federal Endangered Species Act listed plant and animal species and migratory birds, whether they are located on federal, state, or private lands. The DFG has primary responsibility for resident fish and wildlife on state and private lands, and oversees California Endangered Species Act listed plant and animal species and stream alteration issues throughout California.

Humboldt Bay NWR Complex is managed by the FWS, which coordinates with DFG on a variety of management issues.

## What is the National Wildlife Refuge System?



Today, over 100 years later, Humboldt Bay and Castle Rock National Wildlife Refuges are two of more than 545 National Wildlife Refuges encompassing nearly 95 million acres nationwide.

The National Wildlife Refuge System (System) is the largest system of lands in the world dedicated primarily to the conservation of fish, wildlife and plants. The System is spread across 50 states, American Samoa, Puerto Rico, the Virgin Islands, Johnston Atoll, Midway Atoll, and several other Pacific Islands. About

20.6 million acres in the Refuge System are managed as wilderness under the Wilderness Act of 1964.

In 1997 Congress passed the National Wildlife Refuge System Improvement Act (Improvement Act), legislation which provides clear guidance for the management of the Refuge System. The act included a new statutory mission statement and directed the Service to manage the Refuge System as a national system of lands and waters devoted to conserving wildlife and maintaining biological integrity of ecosystems.

The Improvement Act requires the FWS to develop a comprehensive conservation plan for each refuge. It also stated that certain wildlife-dependent recreational uses are priority public uses on refuges and strengthened the compatibility determination process for assuring that these and other activities do not conflict with refuge management purposes and goals.

#### **Humboldt Bay NWR**

#### Humboldt Bay NWR Project Location and Watershed

Humboldt Bay National Wildlife Refuge (HBNWR) is located in Humboldt County, California, with refuge units within and adjacent to Humboldt Bay and associated watersheds. The approved refuge boundary is roughly defined by Hookton Road on the South, Mad River County Park on the north, Highway 101 and Mad River Slough on the east, and the Pacific Ocean on the west (see map).

#### **History of Humboldt Bay NWR**

In 1971, Humboldt Bay National Wildlife Refuge was established to conserve habitat for the great diversity of birds, mammals, fish, amphibians, invertebrates, and plants that occur in the Humboldt Bay area. Between 1971 and 1988 the refuge acquired what are now the Jacoby Creek, Eureka Slough, Table Bluff, Hookton Slough and White Slough Units. When the refuge acquired the lands that are now the Salmon Creek Unit, there were two staff added and the original management plan was written. The northern dune units of the refuge were added more recently. In 1998, The Nature Conservancy donated the Lanphere Dunes Unit to the refuge and in 2006 the Ma-le'l Dunes Unit was added.

The refuge currently consists of 10 different units that total almost 4,000 acres and are managed by a permanent staff of six people along with many volunteers and cooperators.

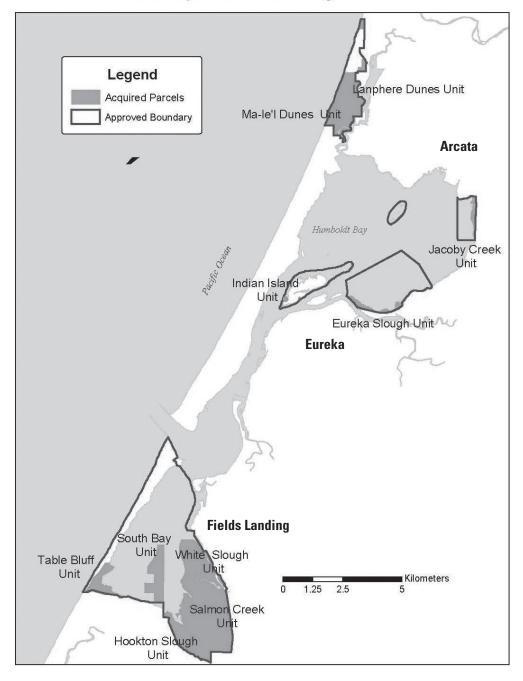
#### Overview of Humboldt Bay NWRs Habitats and Resources

The Refuge's 10 units consist of a mosaic of mudflats, estuarine eelgrass meadows, saltmarsh, brackish marsh, grasslands, seasonally flooded freshwater wetlands, riparian wetlands, streams, coastal dunes, and forest. These habitats support over 316 species of birds, 40 species of mammals, and include two globally threatened dune plant communities. The refuge also provides habitat for approximately 100 species of fish and marine invertebrates, many of which contribute to sport or commercial fisheries, including steelhead, coho and Chinook salmon, and Dungeness crab.

This refuge is one of the most important areas in the U.S. south of Alaska for the black brant. This is especially true during the spring when the Bay is a key

#### Approved Boundary and Acquired Parcels

Humboldt Bay National Wildlife Refuge 2007



staging area for over 60 percent of the brant's flyway population prior to their return to arctic nesting grounds.

Other birds that depend heavily upon the Bay and surrounding habitats for food include waterfowl such as Aleutian cackling geese, wigeon, green-winged teal, pintail, greater scaup, bufflehead, and surf scoters; shorebirds such as willets, marbled godwits, long-billed curlews, dunlin, least and western sandpipers, and other waterbirds such loons, grebes, cormorants, great and snowy egrets, and great blue herons.

Raptors (eagles, hawks, and owls) and songbirds also make significant use of the habitats around the bay.

The main reasons for the waterbird concentrations are the bay's location on the Pacific Flyway and the eelgrass beds and extensive mudflats; the Bay is the largest "wetland complex" between San Francisco Bay and Coos Bay and it contains the largest remaining eelgrass beds between Baja California and Willapa Bay in Washington. These bay habitats also make the Bay an important

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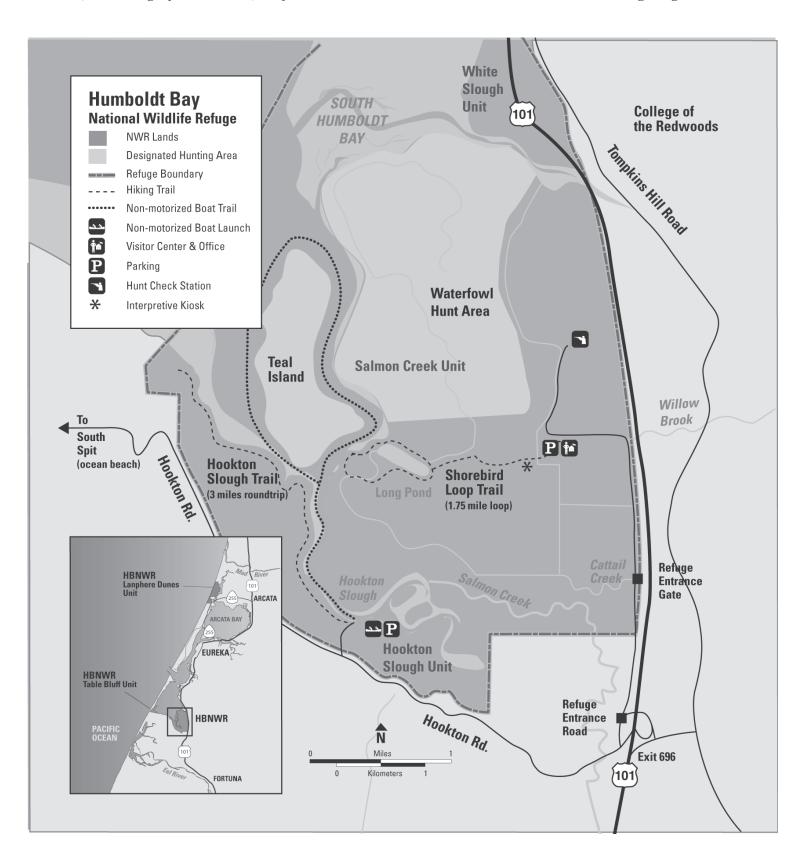
spawning, nursery, and feeding area for fish and other marine life.

Federally listed endangered and threatened species that are present in and around the bay include the bald eagle, brown pelican, western snowy plover, Chinook and coho salmon, steelhead, tidewater goby (a small fish), and two plants: the Humboldt Bay wallflower and beach layia.

#### **Visitor Services at Humboldt Bay NWR**

The Richard J. Guadagno Headquarters and Visitor Center was dedicated almost five years ago in May, 2002. If you have not come out for a visit, we encourage you to do so. The Visitor Center is

located at the Salmon Creek Unit just north of the Hookton Road exit (#696) off Highway 101, on the west side of the freeway and is open daily from 8 am to 5 pm. The Visitor Center has some stunning interpretive exhibits and a beautiful observation room equipped with telescopes for viewing wildlife. There are exciting things to see and do



on the Refuge all year, with peak wildlife viewing from November through March. This is also the starting point for much of the wildlife dependent public use that the refuge offers including: a hiking trail, photoblind and wildlife viewing kiosk, guided walks, environmental education and interpretation, and a managed



 $Mad\ River\ Slough$   $Photo\ ©\ Gary\ Todoroff$ 

waterfowl hunting program. The total number of refuge visitors currently averages 15,000 to 17,000 per year.

The southern portion of the refuge has two interpretive trails. The Hookton Slough Trail is open seven days per week during daylight hours. The Hookton Slough Trail follows a tidal slough 1.5 miles out along the south edge of Humboldt Bay. The 3-mile distance (round trip) passes along grasslands, freshwater and brackish marsh, mudflats, and open water. Look for herons and egrets, as well as shorebirds, waterfowl, and harbor seals.

At the Salmon Creek Unit, the 1.75 mile Shorebird Loop Trail is open during refuge office hours (8am - 5pm) and adjoins some of the refuge's best shorebird viewing areas, has a viewing kiosk along the way, and has a spur that leads to a photoblind. The trail affords a good overview of the diverse seasonal wetlands. Both trails have interpretive panels that illustrate the refuge's wildlife resources and habitat management practices. Look for shorebirds, waterfowl, raptors, songbirds, tree frogs, and river otters.

The hiking trails on the northern dune units are not yet open. At the Ma-le'l

Dunes Unit there will be two miles of hiking trails in the forest. The 0.5 mile railroad berm trail will extend through the forest alongside the Mad River Slough. The trail will pass by a freshwater wetland and culminates at the saltmarsh on the bank of the Mad River Slough. The 2.5 mile forest loop trail

will pass through the coastal coniferous forest and present an excellent view of the tree fall from the December 2005 windstorm. The Lanphere Dunes Unit has approximately 3.5 miles of hiking trails. The trails provide opportunities to view the diverse dune and saltmarsh ecosystems. A permit is needed to visit, but there are guided walks offered by Friends of the Dunes on the first and third Saturdays. Call 444-1397 for more info.

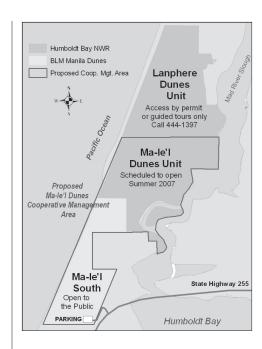
Wildlife viewing from a boat can be excellent. The refuge currently has one launch area for non-motorized boats only. It is located at the Hookton Slough Unit, where a popular trip is to paddle around the remnant dikes of Teal Island.

Another launch will be available later this year adjacent to the planned parking area at the Ma-le'l Dunes Unit. Boaters should always be aware that tides, wind, and weather can change rapidly on Humboldt Bay, and to take the necessary precautions.

Waterfowl hunting is permitted on five of the ten units of the refuge during the regular waterfowl season (typically late October through late January). There is a managed hunt offered on the 330-acre hunt area of the Salmon Creek Unit. Hunting is allowed on Tuesdays and Saturdays until 3 p.m., with 14 hunting blinds/sites, a lottery draw, and a paid permit process. Approximately 1,000 hunters utilize the refuge annually. Hunting is also permitted on portions of the Jacoby Creek, Eureka Slough, South Bay, and Table Bluff units. Hunters can refer to the refuge hunting brochure for further information.

Humboldt Bay and tidal sloughs are open to state regulated fishing opportunities year-round. Refuge areas that are separated from the Bay by land, such as creeks and flooded areas behind levees, are closed to fishing. The Hookton Slough Trail is open to shore fishing; access to other areas is by boat.

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The recently acquired Ma-le'l Dunes Unit is part of the Ma-le'l Dunes Cooperative Management Area which is managed by both the U. S. Fish and Wildlife Service (FWS) and the Bureau of Land Management (BLM). The property was acquired with support from the State Coastal Conservancy, which is also funding the access plan. The plan calls for improvement of existing forest trails, wheelchair accessibility along the existing railroad-berm trail, and an interpretive theme based around the rich Wiyot history of the site. The BLM portion is currently open for day use, however the FWS portion is not yet fully open pending the completion of environmental planning and compliance process. The Friends of the Dunes will be leading guided walks the first Sunday of each month on the FWS portion until it is opened. The projected opening date is the summer of 2007.



Wiyot basket
Photo ©Wiyot Tribe

#### Recent and Ongoing Management Activities at Humboldt Bay NWR

Activities on the southern refuge units have focused on enhancement of seasonal wetlands, restoration of tidal wetlands, and since 2001, management of grasslands for Aleutiann geese and other wildlife. This has included repair and installation of water control structures and dikes and an ongoing project to increase tidal exchange at the mouth of Salmon Creek to improve fish passage, sediment transport and habitat. Emphasis has also been placed on improving opportunities for public use and repair or replacement of management facilities. Results of this include a new Visitor Center, hunting checkstation, photoblind, trails, workshop and bunkhouse since 2001.

The Lanphere and Ma-le'l Dunes Units, located at the upper end of the North Spit of Humboldt Bay and west of Mad River Slough, contain two globally endangered plant communities. Management of the dune/slough units has centered on the restoration and conservation of these unique resources, at the species, community, and ecosystem levels. Restoration has focused on the removal of invasive plants and re-establishment of native plant communities and the animals they support. At the Lanphere Dunes, ongoing restoration since 1992 has resulted in successful restoration of upland nearshore and forested dune communities. This is one of the most successful dune restoration projects on the west coast. The Ma-le'l Dunes, added to the refuge in 2006, are in the process of being restored in the same manner.

Salt marsh restoration in the Mad River Slough was recently begun through the removal of invasive dense-flowered cordgrass. These newly developed dune and wetland restoration techniques can be implemented at other locations around the bay. Management also includes ongoing monitoring and recovery of rare and endangered plant and animal populations.



#### **Castle Rock NWR**



#### **Castle Rock NWR Project Location**

Castle Rock National Wildlife Refuge (CRNWR) lies about eighty miles north of Humboldt Bay and about a half mile offshore from Crescent City, California. Castle Rock NWR is an island of 14 acres in size.

#### **History of Castle Rock NWR**

Castle Rock was privately owned until 1979. During the mid- and late-1970s, speculators were contemplating guano mining, rock quarrying, and construction of a tourist attraction on the island. In 1979 the Service purchased Castle Rock from the Nature Conservancy to preserve habitat for magnificent seabird colonies and marine mammals in perpetuity.

#### **Overview of Castle Rock NWR**

Castle Rock NWR is critical to the survival of several hundred thousand seabirds each year. It is also a key roost site for up to 20,000 Aleutian cackling geese each winter and spring. This growing population appears to be impacting the habitat suitability for seabird nesting. Castle Rock rises 335 feet above sea level with a grassy slope, two large inlets, and cliffs that are important to nesting seabirds in the summer.

Castle Rock is, in fact, known as one of the largest and most important nesting seabird colonies south of Alaska. The estimated number of seabirds using Castle Rock has been as high as 150,000. The cliffs provide nesting habitat for one of the largest breeding populations (>100,000) of common murres on the Pacific coast. Ten other species of seabirds also nest here, including three species of cormorants, pigeon guillemots, Cassin's and rhinoceros auklets, Leach's and fork-tailed storm-petrels, and tufted puffins. Because many of these bird species nest in burrows and crevices and are primarily nocturnal, they avoid predation by western gulls that also nest on the island. Castle Rock NWR also serves as an important haul out (resting site) for marine mammals, including harbor seals, northern elephant seals (both bear pups there), and California and Steller sea lions.

#### **Visitor Services at Castle Rock NWR**

Castle Rock Refuge is closed to all direct public access because it is a very sensitive area for nesting seabirds during the spring and summer, and for roosting Aleutian cackling geese in the winter/ spring. However, the public can view Castle Rock's wildlife from the shore. The soils and vegetation are sensitive to damage by trampling; including damage to the burrows of burrow-nesting seabirds. Additionally, landing on this vertical sea rock is quite treacherous. There are also several species of marine mammals that use the island for rest and/ or breeding. Both marine mammals and seabirds are protected from disturbance by federal law.

#### Management Activities at Castle Rock NWR

Castle Rock Refuge's resource values are maintained by natural processes. The refuge is monitored to ensure that these values have not been compromised. Nesting seabird and Aleutian cackling goose activity is closely monitored on a yearly basis.

#### What is a CCP?

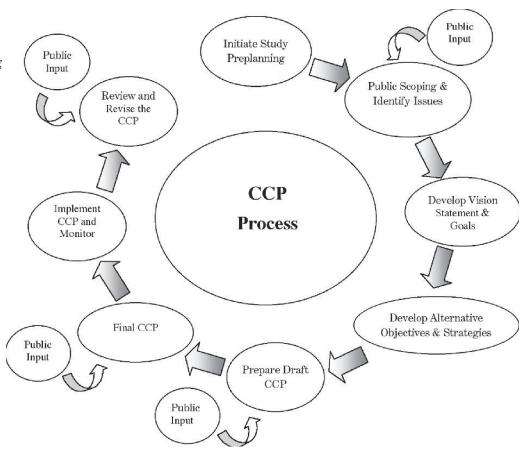
When Congress passed the National Wildlife Refuge System Improvement Act of 1997, it incorporated an underlying philosophy that "wildlife comes first" on refuges.

The act provides the FWS with guidance for managing refuges to ensure the long-term conservation of fish, wildlife, plants, and their habitats. Two important principles of the Improvement Act are to maintain biological integrity, diversity, and environmental health of the refuge and facilitate compatible wildlifedependent recreation.

Every refuge must have a Comprehensive Conservation Plan (CCP) completed by 2012. The CCP will outline refuge goals, objectives, and management strategies. It is a flexible, "living" document that will be updated every 15 years.

#### The CCP:

- Ensures that management of the refuge reflects the purposes of the refuge and the mission, policies, and goals of the National Wildlife Refuge System;
- Provides the public with an understanding of the reasons for management actions on the refuge;
- Provides a vision statement for the refuge;
- Ensures the compatibility of current and future uses of the refuge with its purposes;
- Provides long-term continuity in refuge management; and
- Provides budget justification for operation and maintenance and facility development requests.



The CCP will provide broad management direction and guidance for the refuge, contingent upon future funding and resources. The accompanying environmental document, required by the National Environmental Policy Act, will describe the alternatives considered and their environmental effects. You will have an opportunity to review and comment on the draft CCP and environmental document.

During February, 2007 we will hold our first public scoping meetings to help identify issues and gather information. The key planning steps are listed above and will be listed in future updates so you can track our progress through the planning process.

#### Compatibility of refuge uses

Prior to allowing various public uses on the refuge, federal law requires that the FWS first determine that these specific uses are compatible.

A compatible use is a proposed or existing use of a national wildlife refuge that, based on sound professional judgment of the refuge manager, will not materially interfere with or detract from the fulfillment of the National Wildlife Refuge System mission or the purposes of the refuge.

Compatibility determinations are used to help evaluate such uses and will be integrated as part of the CCP planning process. Many Compatibility Determinations were completed for Humboldt Bay NWR between 1994 and 2005. Compatibility Determinations were made for uses including: environmental education and interpretation, outdoor recreation, research, wildlife observation, photography, grazing and haying, recreational boating/canoe/kayak landing/launching in navigable waters, and Tribal access and gathering.

It is possible that compatibility determinations for other proposed uses will be completed in the course of the CCP planning process. In addition, the Refuge currently has an approved sport hunting management plan and an approved fisheries management plan to guide hunting and fishing on the Refuge.

#### **CCP Schedule**

Fall 2006 Began preplanning

January 2007 Mail out the first Planning Update

February 2007 Hold public scoping

meetings, and begin the CCP process

#### Public Meeting Dates/ Locations

Tuesday, February 13, 2007 6:00 - 8:30 pm Conference Room Del Norte Family Resource Center 207 Price Mall Crescent City CA 95531

Thursday, February 15, 2007 5:30 - 8:00 pm Large Lakeside Room (Building #20 in the cafeteria) College of the Redwoods, Eureka Campus 7351 Tompkins Hill Road Eureka CA 95501

Saturday, February 17, 2007 2:30 - 5:00 pm Conference Room Humboldt Area Foundation 373 Indianola Road Bayside CA 95524

# Help us plan the future of Humboldt Bay NWR Complex

During winter 2007 interested individuals, agencies, tribes, organizations, and other stakeholders will be invited to express their concerns and share their visions for the refuge.

This will be your opportunity to help us identify issues and concerns. and for us to answer anv questions you may have. Your comments and/ or participation will be critical to the success of this planning effort. Please send your initial written suggestions for Refuge management via mail, fax or



Brown pelican

e-mail to David Bergendorf (contact information to the right) by February 28, 2007. However, there will be additional opportunities to comment once a draft CCP has been prepared.

### Please feel free to contact us!

We are available to provide additional information about the refuge history, goals, and accomplishments to date, and to answer any questions about the planning process. Feel free to call, write, e-mail, or come to see us.

If you did not receive this newsletter through the mail and would like to be on our mailing list, please contact us. You can also find information at our website http://pacific.fws.gov/planning/

If you would like to be removed from the list or are receiving multiple copies of these notices, please let us know.

Eric Nelson, Refuge Manager U.S. Fish and Wildlife Service Humboldt Bay NWRC P.O. Box 576 1020 Ranch Rd. Loleta, CA 95551-9633 (707) 733-5406 Eric T Nelson@fws.gov

Office hours: Monday-Friday 8:00 a.m. - 5:00 p.m.

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